PRODUCTION ADJUSTMENTS IN OHIO AGRICULTURE IN 1950
(Under assumed conditions)

Estimates Prepared by
The Ohio Agricultural Production Adjustment Committee

Department of Rural Economics and Rural Sociology
Mimeograph Bulletin No. 211

Ohio Agricultural Experiment Station
and
Ohio State University

Columbus, Ohio
September, 1949

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I. INTRODUCTION

Each year from 1942 to 1948 the Ohio Agricultural Experiment Station and the College of Agriculture of Ohio State University cooperated with the Bureau of Agricultural Economics and the United States Department of Agriculture, in preparing a statement of suggestions for crop and livestock production in Ohio for the year ahead. In view of the fact that the need for production adjustment analyses still prevails the Ohio Agricultural Experiment Station and the College of Agriculture have continued the work and prepared the present report.

Assistance in developing the pattern for 1950 was given by The Ohio Production Adjustment Committee. The membership of this committee consists of representatives of the following organizations:

Ohio Agricultural Experiment Station
College of Agriculture, O.S.U.
Bureau of Agricultural Economics, U.S.D.A.
Soil Conservation Service
U.S.D.A. Agricultural Council for Ohio
The Production & Marketing Administration, Ohio

The data were assembled and this report prepared by J. H. Sitterley of the Department of Rural Economics, Ohio State University.

The committee has attempted to suggest what Ohio farmers should produce in 1950, considering prospective demand and requirements for 1950 production and long-time stability in the farming of the state. In the development of the various crop and livestock estimates, the committee has drawn from historical data, past studies, and the best judgment available.

The "long-time objective" crop and livestock estimates presented in the report, Postwar Crop and Livestock Pattern for Ohio, December 1944, were used as a guide to the desired level of production in a stabilized agricultural situation for Ohio. The present report is developed primarily on a state basis since the detailed type of farming area analysis of 1944 is still considered to be reliable and continues to meet the need for such data.

II. BASIC ASSUMPTIONS

As in the past studies, the estimates presented in this report were arrived at as nearly as possible on a basis of a set of assumed conditions. The following basic assumptions were made:

1. That the resources available to Ohio farmers in 1950, in the way of labor, machinery, fertilizer, and other supplies will be not less than that of 1949.

2. That employment, though down somewhat, will continue at a level much above that of the years preceding the recent war.

3. That the prices for farm products, though lower than in 1949, will continue at attractive levels.

4. That the supply of farm products at the end of 1949 will make desirable some adjustment downward in crop acreages for 1950.

5. That it is highly essential that increasing effort be given to checking soil deterioration where occuring and to the development of a soil restoration program throughout the farming areas of the state.

The estimates and suggestions of this report, based upon these assumptions, are not intended to be goals for 1950. The estimates represent the best judgment of the group as to the crop acreages and the livestock numbers that Ohio farmers should produce in 1950 under the assumed conditions. In setting goals, further consideration should be given to national and international needs. Thus, the goals for Ohio may be established either above or below the level of production suggested in this report.

III. CROP PRODUCTION IN 1950

With a large carryover of feed grains at the end of the 1948-49 feed year and prospects for even larger stocks a year hence together with the easing domestic and world food situation, the committee was of the same opinion as the 1948 committee that major steps should be taken toward the establishment of a crop program on our farms that would check the deterioration of the soil in the interest of national security and individual well being.

Utilization of Cropland

The total acreage of cropland in Ohio increased slightly during the war period. In the interests of soil conservation and efficient production this trend should be reversed and some low producing land now in crops should be retired to other uses. The 1948 committee proposed that a retirement of 78,000 acres or about .5 percent of the total cropland take place in 1949. In view of the expected acreages in 1949 it is questionable if any reduction took place. Inasmuch as the need for some retirement still exists the same proposal was made for 1950. The long-time objective provides for withdrawing about one-half million of the least productive acres from crop production.

TABLE 1 - Ohio: Suggested Utilization of Cropland in 1950, With Comparisons

Use of cropland	Reported 1948		Expected 1949		1950 Suggested		Long-time objective	
	Acreage	% of total cropland	Acreage	% of total cropland	Acreage	% of total cropland	Acreage	% of total cropland
Column	1	2	3	4	5	6	7	8
	1000 acres	%	1000 acres	%	1000 acres	%	1000 acres	%
Intertilled crops	4,780	37	4,646	36	4,133	32	3,703	30
Small grain crops	3,628	28	3,705	28	3,577	28	3,004	24
Sod crops	4,066	31	4,127	32	4,590	35	5,083	40
Tame hay & seed crops	2,466	19	2,527	20	2,655	20	3,035	24
Rotation pasture	1,600	12	1,600	12	1,935	15	2,048	16
Idle cropland	604	4	600	4	700	5	754	6
Total cropland	13,078	100	13,078	100	13,000	100	12,544	100

The area of intertilled crops suggested for 1950 is 4,133,000 acres. This is 513,000 acres below 1949. Such a decrease, although desirable, is unlikely and it is not expected that less than 4,348,000 will be planted in 1950 if average weather conditions prevail. The maximum intertilled acreage reported for the state was 5,464,000 in 1944, since then the reported acreages have been as follows:

Reported for 1945 - - - -	5,057,000 acres
Reported for 1946 - - - -	4,839,000 acres
Reported for 1947 - - - -	4,569,000 acres
Reported for 1948 - - - -	4,780,000 acres
Expected in 1949 - - - -	4,646,000 acres
Probable in 1950 - - - -	4,348,000 acres
Suggested for 1950 - - -	4,133,000 acres

The suggested downward adjustment in the intertilled acreage as well as in the proportion of the total cropland planted to such crops is a big but much needed step in the direction recommended as a long-time objective for a balanced conservational type of farming. Some progress has already been made but much still remains to be achieved. In view of the favorable seasons both last year and this and the decreased demand it was the view of the committee that the opportunity exists now for considerable further adjustment in intertilled acreage. The suggested acreage for 1950 would still be more than 400,000 acres above the long-time objective. However, it would be a definite advance toward a system of farming that will eventually rebuild the soils of the state and make for national security and more stable farm income.

The relatively high small grain acreage suggested for 1950 was deemed desirable to obtain the needed grass seedings for expanding the sod crop acreage so essential to soil maintenance and restoration. The long-time objective for small grain is 3,004,000 acres. Not until less sod land is plowed each year and more is allowed to carry over for a second year will it be possible to get by with a smaller annual acreage of new sod crop seedings. These are almost universally made in small grain thus necessitating the present high acreage. Small grain acreages have been as follows:

Reported for 1944 - - - -	3,263,000 acres
Reported for 1945 - - - -	3,613,000 acres
Reported for 1946 - - - -	3,276,000 acres
Reported for 1947 - - - -	3,170,000 acres
Reported for 1948 - - - -	3,628,000 acres
Expected in 1949 - - - -	3,705,000 acres
Probable in 1950 - - - -	3,552,000 acres
Suggested in 1950 - - - -	3,577,000 acres

The suggested sod crop acreage is nearly one million acres above the wartime low which occurred in 1944. In 1944 and 1945 sod crops comprised less than 30 percent of the total cropland. During these years we were depleting the productivity of our cropland in excess of .7 percent per year. Realizing the impossibility of continuing such a program for long, farmers stepped up their sod crop acreage. In 1946, 32 percent and in 1947, 33 percent of the cropland was in sod. The suggested 1950 acreage is 35 percent and the long-time objective is 40 percent of the total cropland. The short

feed crop production in 1947 and the insuing high prices resulted in larger planting of intertilled crops and a corresponding reduction in sod crops in 1948. Nevertheless the 1948 sod crop acreage remained well above the war-time low. Sod crop acreages have been approximately as follows:

1944 - - - -	3,582,000 acres
1945 - - - -	3,642,000 acres
1946 - - - -	4,220,000 acres
1947 - - - -	4,314,000 acres
1948 - - - -	4,066,000 acres
1949 - - - -	4,127,000 acres
Suggested 1950 - - - -	4,590,000 acres

During the past few years the acreage of idle cropland (including crop failure) has been at the low level of about 5 percent of the total cropland area. The stimulus of the war and virtually no abandonment or crop failure have been the prime factors in holding the idle acreage near the level suggested as a long-time objective.

Effects on Soil Productivity

The long-time trend in the productivity of the average soils of Ohio has, for many years, been downward. Nevertheless, the yields of crops have been sustained and even raised by the interjection of numerous new cultural techniques and more efficient varieties. However, had not the productivity of the soils been declining, these new techniques and plant strains would have produced far greater increases in yields.

For a number of years Ohio agronomists have been calculating, by means of a system of productivity balances, the percentage changes that occur annually in the productive capacities of the soils of the state under specific cropping and management systems (see Table 2).1/ These calculations indicate that slight progress was made during the thirties toward a better balance (lesser negative factor) but this was abruptly reversed by the stimulus to produce in order to meet wartime requirements for food. This acceleration in the rate of soil deterioration was a source of concern to farmers and many considered ways and means of easing the drain on their land. This concern began to be reflected in their farming in 1945. In that year the soybean acreage was cut 223,000 acres below the peak reached in 1944. At the same time the small grain acreage in which meadow seedings are made (the first step toward soil rebuilding) was increased 350,000 over 1944. Sod acreage was also increased. In 1946 farmers again cut their soybean acreage by approximately one-fourth million and further increased the area in sod crops by a similar amount. These adjustments were sufficient to produce an appreciable reduction in the rate at which the state's soils were being depleted. In addition to these shifts in the state's cropping pattern toward less depletion there has been a rapid expansion in the instillation of erosion and water control measures which have also decreased the rate (see Table 2).

The sharp curtailment in the rate of soil depletion which took place in 1947 was influenced appreciably by the adverse spring season which restricted the acreage of intertilled crops below what it would otherwise have been. With the larger acreage of intertilled and small grain crops in 1948, some

1/ "Our Heritage - The Soil," Ohio Agricultural Extension Service, Bul.175.

increase in the rate of soil deterioration again took place. The crop pattern expected in 1949 together with the further expansion in erosion and water control measures to be placed in operation by farmers will cut the rate of depletion to -.48. The suggested program for 1950 would lower the rate to -.33.

TABLE 2 - Ohio: Soil Productivity Balance*

Year	Productivity balance factor	What's happening to productivity of Ohio soils
1929	-.65	depleting
1935	-.61	depleting
1939	-.51	depleting
1942	-.61	depleting
1943	-.64	depleting
1944	-.76	depleting
1945	-.70	depleting
1946	-.63	depleting
1947	-.52	depleting
1948	-.55	depleting
1949	-.48	depleting
1950 suggested	-.33	depleting
Long-time objective	Positive balance	maintaining

*Data prepared by J. A. Slipher, Extension Conservationist, Ohio State University.

The long-time objective is a crop and livestock pattern for the state that will maintain and improve the productivity of the land. In the interests of national and individual farm security, progress toward this goal should be made as rapidly as conditions permit. Farm management studies in Ohio show that farming is more profitable where the productivity of the land is maintained than where it is exploited. 1/ The farming pattern of the state will still require major adjustments before the long-time objective—a positive productivity balance—is reached.

The suggested cropping pattern for 1950 with its relatively high acreages of wheat and oats is a temporary situation. It is prerequisite to a further expansion of the acreage of sod crops—the basis for a soil maintaining and rebuilding program. In addition to acreage adjustment, the continuation and intensification in 1950 of the use of lime, fertilizer, and manure will do much to facilitate the attainment of the long-time objective.

1/ "The Relationship Between Soil Maintenance and Profitable Farming," Ohio Agricultural Experiment Station, Bulletin 604.

Acreage Adjustments - Major Crops

Two major adjustments are proposed in the state's cropping pattern for 1950. It is suggested that the corn acreage be reduced approximately a half million acres below the 1949 figure and second, that sod crops be increased by a corresponding amount, (see Form 1). Similar recommendations were made in 1948 for the 1949 crop year, however, only about 20 percent of the proposed adjustment was placed into effect. It is expected that a somewhat greater adjustment will be made in 1950 than in 1949 but not as much as appears desirable from the standpoint of conservation and the stability of the industry.

Corn: The very large crop in prospect both in the state and nation for 1949 along with the large carryover from last year's big crop may be expected to result in a still larger carryover on October 1950, unless further increases occur in hog and poultry numbers than are now anticipated. With average yields the 3,100,000 acres suggested for 1950 together with the carryover of feed grains from this years's crops would provide tonnage of feed grains ample for a livestock equal to the present one. A reduction in corn acreage of the magnitude proposed is highly desirable in view of the current condition of the soil on the large majority of the farms. Furthermore, it can be made without curtailing the 1950-51 livestock operation below the 1948-49 level if no more than 850,000 litters are farrowed in 1950.

TABLE 3. The State's Corn Acreage, Production, and Carryover, 1944 to date.

	Acres (000)	Production bushel (000)	Carryover bushel October 1 (000)	Production plus carryover (000)
1933-44 average	3,519	155,800	---	---
1944 reported	3,781	142,956	9,638	152,594
1945 reported	3,592	176,913	8,864	185,777
1946 reported	3,671	178,409	12,480	190,889
1947 reported	3,414	138,826	15,850	154,676
1948 reported	3,701	215,924	5,712	221,636
1949 expected*	3,590	200,480	25,000	225,480
1950 suggested	3,100	155,000	32,130	187,130

* July 1 estimate

Soybeans: A rapid decline in the acreage of soybeans occurred following the record acreage of about 1,500,000 in 1944. The 1945 acreage dropped about 250,000 acres below the 1944 peak. This reduction was followed by another decline of 290,000 acres in 1946. In 1947 approximately the same acreage of soybeans was planted as in 1946. The acreages in 1948 and 1949 were 60,000 and 88,000 acres respectively below the 1947 plantings. For 1950, a soybean acreage of 835,000 is suggested. This is still considerably above that recommended as a long-time objective.

Wheat: The acreage of wheat has been expanding during the past several years. An exception to this was 1946 due to unfavorable weather for maturing and harvesting corn and soybeans. However, the additional acreage that farmers had intended to seed to wheat were planted to oats in the spring of 1946. Good yields, favorable sowing conditions and the strong demand situation have been important causes for this increased acreage.

A wheat acreage of 2,275,000 is suggested for 1950 (seeding in fall of 1949). This is considerably above the long-time objective but is considered justifiable in the short run if sod acreages are to be increased. Furthermore, it provides ground cover over winter, thus reducing erosion.

Oats: If Ohio farmers are able to seed the 2,275,000 acres of wheat suggested for this fall, then about 1,300,000 acres of oats should be seeded in the spring of 1950. This is approximately the same as that seeded in 1949. If a smaller wheat acreage is seeded this fall, then a greater acreage of oats should be planted in 1949. The oat acreage suggested for 1949 is considerably above the long-time objective. Improved oat yields, the increased acreage of corn picked, and favorable prices in recent years have made this crop more attractive to the farmers of Ohio.

Hay and Pasture Crops: The harmful effects of years of soil deterioration are made less obvious by favorable weather, constantly improved seeds, and heavier and heavier applications of fertilizer. The unusually good growing seasons of both 1948 and 1949 cause us to readily forget previous unfavorable seasons which accentuate the effects of soil exploitation. Advantage should be taken of the opportunity provided by two consecutively favorable crop years to reduce soil depleting crops in favor of sod crops which put the land in a better position to cope with adverse weather conditions when they appear.

A definite effort should be put forth now to expand the sod crop acreage. The suggested acreage for 1950 calls for 123,000 acres more hay and 335,000 acres more rotation pasture than was produced in 1947. In addition, it is the committee's recommendation that alfalfa and clover be included in all new meadow seeding on land capable of producing these crops.

For the state as a whole the production of hay and rotation pasture has about met the minimum needs for livestock production in recent years. The proposed increase in acreage would permit the livestock access to both more and better quality as it would be unnecessary for them to eat the low grade hay and unpalitable pasture. This in turn would make for greater efficiency in livestock production as well as more productive soils.

Potatoes: The downward trend in the acreage of potatoes has continued throughout the war period to the current crop year, declining from the 1937-41 average of 110,000 acres to 38,000 acres in 1949. Labor shortages, disease and other risk factors have caused the potato grower considerable difficulty. Furthermore, many farmers who formerly grew a few potatoes for their own use have discontinued this practice in recent years. The committee feels that this downward trend should be stopped and reversed since Ohio is now a deficit potato producing area. The acreage of potatoes suggested for 1950 is 55,000 as compared to the long-time objective which provides for 75,000 acres.

Form 1

Ohio: Suggested use of farm land in 1950 with comparisons

Use of farm land	Acreage	Reported for 1948	Expected in 1949	Probable in 1950	Suggested for 1950	Long-time objective
Column	1	2	3	4	5	6
		1000 acres	1000 acres	1000 acres	1000 acres	1000 acres
Corn, all	P	3,701	3,590	3,300	3,100	2,750
Soybeans, grown alone	P	940	912	880	835	697
Soybeans for beans	H	908	862	840	800	675
Soybeans for hay	H	24	40	30	25	22
Tobacco, all	H	18	19	19	22	26
Burley	H	12	13	13	15	17
Other domestic	H	6	6	6	7	9
Sugar beets	P	13	28	34	45	45
Irish potatoes	P	41	38	45	55	75
Popcorn	P	15	7	10	10	10
Truck crops for processing, total	P	51	52	58	64	80
Green peas	P	2.4	3.1	4	5	
Tomatoes	P	25	23	28	32	
Sweet corn	P	20.4	21	21	21	
Lima beans	P	.9	.9	1	1	
Cabbage (kraut)	P	1.5	1.3	1.5	2	
Cucumbers for pickles	P	2.3	2.4	2.5	3	
Truck crops for fresh market	H	11	10	12	12	20
Cabbage	H	2.6	2.4	2.4	2.5	
Cantaloups	H	1.2	1.2	2	2	
Carrots	H	1.6	1.4	1.6	1.6	
Celery	H	.9	.9	1	1	
Onions	H	.8	.8	1	1	
Tomatoes	H	3.6	3.5	4	4.4	
Adjustment for multiple use		10	10	10	10	
Total cropland used for intertilled crops 1/		4,780	4,646	4,348	4,133	3,703
Oats	P	1,226	1,312	1,350	1,300	1,074
Barley	P	19	15	25	25	36
Winter wheat	P	2,377	2,377	2,200	2,275	1,924
Oats for grain	H	1,202	1,286	1,310	1,270	1,050
Barley for grain	H	18	14	25	25	36
Grains cut green for hay	H	15	15	20	25	24
Rye for grain	H	20	14	25	25	49
Buckwheat	P	16	17	17	17	17
Adjustment for multiple use		30	30	65	65	96
Total cropland used for close-growing crops 1/		3,628	3,705	3,552	3,577	3,004

Form 1 (continued)

Ohio: Suggested use of farm land in 1950 with comparisons

Use of farm land	Acreage	Reported for 1948	Expected in 1949	Probable in 1950	Suggested for 1950	Long-time objective
Column	1	2	3	4	5	6
		1000 acres	1000 acres	1000 acres	1000 acres	1000 acres
Hay, all tame--except soybean, cowpea, peanut & small grain hay	H	2,409	2,427	2,485	2,550	2,910
Hay, all tame	H	2,448	2,482	2,535	2,600	2,956
Seeds, hay and cover crop, all	H	307	350	365	425	435
Alfalfa	H	3	5	10	20	60
Red clover	H	250	250	260	300	250
Sweet clover	H	5	10	10	15	25
Alsike	H	25	25	25	30	40
Timothy	H	24	60	60	60	60
Rotation (cropland) pasture		1,600	1,600	1,820	1,935	2,048
Adjustment for multiple use		250	250	270	320	310
Total cropland used for sod crops 1/		4,066	4,127	4,400	4,590	5,083
Idle cropland		604	600	750	700	754
Total cropland 1/		13,078	13,078	13,050	13,000	12,544
Orchards, vineyards, & small fruits (adjusted)		10	10	10	10	
Orchards, vineyards, & small fruits, total		140	140	140	140	
Other plowable pasture		2,300	2,300	2,300	2,300	2,300
Open non-plowable pasture		2,500	2,500	2,500	2,500	2,500
Woodland pasture		1,400	1,300	1,300	1,200	350
Woodland unpastured and other land in farms		2,500	2,600	2,600	2,700	
Total land in farms		21,928	21,928	21,900	21,850	21,400
Winter cover crops, legumes	P	10	10	10	15	
Other pasture in farms	U					
New seedings after harvested nurse crops	U	1,650	1,650	1,650	1,550	
Hay and seed-crop aftermath	U	1,000	1,000	1,000	1,200	
Winter grains grazed (pre-harvest)	U	50	50	50	50	
Stalk and stubble fields	U	600	600	600	500	

1/ Total acres used for crops is less than the sum of the acreages of individual crops to the extent that two or more crops were, or will be, planted on or harvested from the same land during the year.

P = Planted acres
H = Harvested acres
U = Used

Truck crops: Labor shortages and the profitableness of alternatives have kept the acreages of the truck crops for processing only moderately higher than the 1933-42 average. Truck crop acreage for the fresh market has in recent years fallen substantially below the ten-year prewar average. Sixty-four thousand acres of the truck crops for processing are suggested for 1950.

Probable Yields

The probable yields in 1950 were set at levels approximating rather closely the average yields obtained during the 1937-41 period except in the case of corn (see Form 2). The 1950 probable corn yield was set at 50 bushels per acre as compared to the 1937-41 average of 45 bushels. This upward adjustment was based on a more widespread use of hybrid corn, particularly the newer higher yielding varieties. Also, the use of more fertilizer on corn. The appraisal of weather as a factor in the high yields of the past seven or eight years has been a difficult task. No doubt a return of somewhat "more normal" weather would result in lower yields than have been harvested in recent years.

Soybean yields for 1950 were estimated at 21 bushels per acre as compared to a 19 bushel yield during the 1937-41 period. New higher yielding varieties along with greater farmer experience with this relatively "new" crop should raise the average yield at least one bushel per acre.

Tame hay yields in recent years have generally exceeded the 1937-41 average of 1.38 tons per acre. The application of greater quantities of lime and fertilizer to the rotation during the past few years has had a favorable effect. The probable yield of tame hay in 1950 has been estimated at 1.45 tons per acre, compared to the long-time objective of 2.0 tons.

Total Production

If the estimated acreages and yields materialize as indicated by the July crop reports the total production in 1949 of corn, small grain (including entire wheat crop) and soybeans will be 32 percent larger than the 1935-44 average and the second largest on record, 1948 being the largest for the state (see Table 3). Probable production in 1950, based on suggested acreages (Form 1) and yields (Form 2), would be about 9 percent above the 1935-44 average.

Form 2

Ohio: Probable crop yields per acre in 1950 with comparisons

Crop	Acre-age	Unit	Base period	Yields per acre: Average for base period	Yields per acre: Probable in 1950	Yields per acre: Long-time objective
Column	1	2	3	4	5	6
				Units	Units	Units
Corn, all	P	Bu.	1937-41	44.9	50	56
Soybeans for beans	H	Bu.	1937-41	19.2	21	22
Burley tobacco	H	Lb.	1937-41	915	1150	1300
Other domestic tobacco	H	Lb.	1937-41	1003	1250	1400
Sugar beets	P	Ton	1937-41	7.5	10	12
Irish potatoes	P	Bu.	1937-41	104.4	150	200
Oats for grain	H	Bu.	1937-41	36.3	42	45
Barley for grain	H	Bu.	1937-41	26.3	26	28
Winter wheat	P	Bu.	1937-41	20.2	22	25
Rye for grain	H	Bu.	1937-41	15.8	16	16
Buckwheat	P	Bu.	1937-41	16.4	16	16
Peas	P	Ton	1937-41	0.6	0.6	0.8
Tomatoes	P	Ton	1937-41	6	6	7
Sweetcorn	P	Ton	1937-41	1.7	1.7	2.3
Cabbage (Kraut)	P	Ton	1937-41	7.8	7.8	9.5
Hay, all tame	H	Ton	1937-41	1.38	1.45	2.0
Rotation (cropland) pasture		a.u.m.			2.5	3.5
Open permanent pasture and range in farms		a.u.m.			1.5	2
Woodland pasture in farms		a.u.m.			0.5	0.8
Other pasture in farms		a.u.m.			0.75	1

H = Harvested

P = Planted

TABLE 4 - Ohio: Suggested 1950 Production of Major Crops, With Comparisons

Crop	1935-44 Average		1948 Reported		1949 Indicated		1950 Probable		1950 Suggested 1/	
	Bushels (1000)	Tons (1000)	Bushels (1000)	Tons (1000)	Bushels (1000)	Tons (1000)	Bushels (1000)	Tons (1000)	Bushels (1000)	Tons (1000)
Corn	155,800	4,364.1	215,924	6,048.3	200,480	5,615.6	165,000	4,621.8	155,000	4,341.7
Wheat	41,875	1,257.5	57,648	1,731.1	58,825	1,765.5	48,400	1,453.4	50,050	1,503.0
Oats	41,021	656.3	54,090	865.4	51,440	823.0	55,020	880.3	53,340	853.4
Barley	747	17.9	540	12.9	406	9.7	650	15.5	650	15.5
Rye	1,075	30.1	360	10.0	252	7.0	400	11.2	400	11.2
Buckwheat	283 2/	7.1	304	7.6	272	6.8	272	6.8	272	6.8
Soybeans	9,889 2/	297.0	18,614	558.9	17,240	517.7	18,480	554.9	17,535	526.5
TOTAL	----	6,630.0	----	9,234.2	----	8,746.3	----	7,543.9	----	7,258.1
% of 1935-44 average	----	100.0		139.2		131.9		113.8		109.4
Tame hay	----	3,410.0		3,516		3,351		3,675		3,770
% of 1935-44 average	----	100.0		103.1		98.2		107.7		110.5

1/ Based on suggested acreages, Form 1, and normal yields, Form 2.

2/ 1934-44 average.

IV. LIVESTOCK NUMBERS AND PRODUCTION IN 1950-51

Estimated Livestock Numbers and Production

Horses: The horse population in the state continues to decline. The number of colts being raised are insufficient to maintain even one-half of the present number of horses. By January 1, 1950, the number will be well below 150,000 head (Form 4). This continued downward trend has made and will continue for a few years more to make available feed and pasture for other types of livestock.

Milk cows: On January 1, 1945, there were 1,172,000 milk cows on farms in the state. This was the largest number to be recorded to date. Since then the number has dropped each year and on January 1, 1949, stood at 1,060,000 head. In view of our expansion in population the continued heavy demand for dairy products and the abundant feed supplies for the coming year, an attempt should be made to maintain present cow numbers and, if possible, to increase them somewhat. However, the likelihood of any appreciable increase during the remainder of 1949 and the early part of 1950 is highly improbable. The current lack of replacement stock makes any sizeable increase impossible.

Heifer calves saved annually for replacement dropped from 287,000 in 1942 to 252,000 in 1945. In 1946 slightly more were saved than in the previous year. Again in 1947 the number of heifer calves saved dropped. On January 1, 1948, there were 28,000 more one to two-year olds on Ohio farms than a year earlier as a result of the increased number of heifer calves saved in 1946. On January 1, 1949, there were only 247,000 one to two-year old heifers reported.

Beef cattle: Abundant roughage and pasture on many farms together with high prices of both feeder and finished cattle have resulted in a slight increase in beef cow numbers. As more hay and pasture become available the number should be expanded still further.

The prospects for a large corn crop and the continued heavy demand for finished cattle would normally result in a large number of cattle being placed on feed. However, the high price of feeders and the lack of confidence in finished cattle prices in 1950 will hold numbers down to or below those put on feed during the 1948-49 feed year.

Poultry and eggs: The number of hens and pullets on farms is expected to be larger January 1, 1950, than a year earlier. In 1948 the narrow egg feed ratio and the tight feed situation throughout the hatching season combined to hold down the number of chickens raised and in turn the number of hens and pullets. The expected 1949 production of 29,000,000 chickens will make possible a hen and pullet number of about 19,000,000 for January 1, 1950. A 1950 production similar to 1949 is suggested with about the same number of hens and pullets saved for the winter of 1950-51 as in 1949-50.

Sheep: Sheep numbers have been on the down grade since 1943. In the opinion of the Production Adjustment Committee the downward adjustment has

been carried too far on many farms from the standpoint of sound economy and some increase in number is desirable particularly in the medium wool breeds. The long-time objective established for the Post War Crop & Livestock Pattern for Ohio is two million head. There is some evidence of renewed interest in sheep with the result that numbers are not expected to drop below the current level.

In view of the feed grain supply and favorable lamb prices the number of lambs put on feed in 1950 is not expected to fall below the number fed this year even though the total lamb crop is below last year. Some increase in feeding of native lambs if possible would seem desirable under the present feed and price situation.

Hogs: The very large corn crop of 1948 and the favorable prices growing out of the reduced farrowings following the small corn crop of 1947 lead to a substantial increase in farrowing in 1949. The increase was greater than expected and somewhat greater than was considered desirable by the 1948 committee. The 1948 committee was of the opinion that a sizeable amount of the 1948 corn crop should be carried over to permit a lower corn acreage in 1949 and, furthermore, that the number of farrowings suggested, together with other sources of meat, would provide a per capita meat supply for 1949 at or near the all time peak. The 1949 committee holds much the same opinion. It is the committee's belief that not more than 825,000 (combined spring and fall) litters should be farrowed in 1950 (see Table 5). This number would permit the accumulation of a sufficient stock of old corn on farms to enable farmers to materially reduce their 1950 corn acreage and with average yields still have sufficient grain for the 1950-51 feed year to feed out the pigs from an equal number of litters and somewhat more other livestock than the 1949-50 feed year.

The committee strongly urges marketings at lower weights than prevailed during the war and immediate post war years. Efficiency of production and the reduced demand for fats and oils make this desirable.

TABLE 5 - Ohio: Corn Production and the Number of Sows Farrowed by Years from 1940 to Date

Period or year	Production 1000 bu.	Sows farrowed (1000 head)		
		Spring	Fall	Total
1935-44 average	155,800	401	350	751
1940	122,360	450	367	817
1941	160,974	392	360	752
1942	185,752	459	432	891
1943	174,042	551	488	1,039
1944	142,956	474	337	811
1945	176,913	360	364	724
1946	178,409	400	335	735
1947	138,826	428	342	770
1948	215,924	381	352	733
1949 indicated	200,480	469	405	874
1950 probable	165,000	450	400	850
1950 suggested	155,000	435	390	825

Livestock Feed Requirements

With more abundant feed supplies somewhat more liberal feeding practices are being practiced, particularly in the case of roughages and pastures. In view of this, the grain and hay consumption rates per head were raised for dairy cows, replacement stock, and feeder cattle. The hay consumption rate was also increased for beef cows. On the basis of these revised feeding rates livestock numbers and production (Form 3) 4,814,000 tons of grain were required in 1948-49. The expected livestock program for the 1949-50 feed year will require about 4.9 million tons and the suggested program for 1950-51, 4.8 million tons. In addition to the grain, 3,136,000 tons of hay and 12,218,000 animal unit months of pasture were required in 1948-49. The suggested livestock program for 1950-51 will require slightly more hay and pasture than was needed in 1948-49.

Availability of Feed

On the basis of the July 1, 1949, acreage and production estimates, feed grain production and wheat fed on farms will make available for feeding (adjusted for seed requirements and change in carryover) in 1949-50 a total of 6,285,800 tons. This is approximately the same as was available the previous year (see Form 3).

The 6,285,800 tons of feed grains estimated to be available for feeding in 1949-50 include 150,000 tons or 5,000,000 bushels of wheat that will be fed on farms where grown.

The suggested 1950 cropping pattern for Ohio with normal yields (see Form 1 and 2) together with carryover stocks that will exist if no further increase occurs in livestock numbers will provide 5,852,000 tons of feed grain for use during the feed year beginning October 1, 1950.

Feed Balance Sheet

It appears there was available for out shipments and industrial use about 1½ million tons of feed grains during the 1948-49 feed year. On the basis of July 1 estimates and expected livestock numbers, at least 1¼ tons will be available for industrial use and out shipment during 1949-50. If the suggested crop and livestock patterns for 1950-51 were to be carried out there would be approximately one million tons of feed grains available for industrial use and out shipment during 1950-51.

Some hay will also be available for out shipment unless farmers feed more liberally and use some of the lower grade hay for bedding. Pasture of fair to good quality is still barely adequate to meet the needs particularly in late summer and early fall.

Form 3

Ohio: Supply of feeds available for feeding livestock and for other purposes, with comparisons
1950-51

Item	Year beginning October 1		
	1948-49 reported	1949-50 expected	1950-51 suggested
	Tons 1000	Tons 1000	Tons 1000
Feed Grains			
Corn, all			
Carryover beginning of year	160.1	700.0	900.0
Production (inc. gr. in silage and fodder)	6,048.3	5,615.6	4,341.7
Total supply	6,208.4	6,215.6	5,241.7
Seed	16.8	16.8	16.8
Carryover end of year	700.0	850.0	450.0
Net supply	5,491.6	5,348.8	4,774.9
Oats			
Carryover beginning of year	39.6	121.1	150.0
Production	865.4	823.0	853.4
Total supply	905.0	944.1	1,003.4
Seed	48.0	48.0	48.0
Carryover end of year	121.1	125.0	100.0
Net supply	735.9	771.1	855.4
Barley			
Carryover beginning of year	1.6	1.5	1.5
Production	12.9	9.7	15.5
Total supply	14.5	11.2	17.0
Seed	.8	.8	.8
Carryover end of year	1.5	1.5	1.5
Net supply	12.2	8.9	14.7
Other grains			
Wheat fed on farms where grown	150.0	150.0	200.0
Rye fed on farms where grown	4.0	3.0	3.0
Buckwheat fed on farms where grown	4.0	4.0	4.0
Total net supply of feed grains	6,397.7	6,285.8	5,852.0
Total needed for food and industrial use	350.0	350.0	350.0
Total available for feeding livestock and for outshipments	6,047.7	5,935.8	5,502.0
Total needed for feeding livestock	4,814.0	4,915.8	4,795.7
Total available for outshipments			
Total inshipments needed			

Form 3 (continued)

Ohio: Supply of feeds available for feeding livestock and for other purposes, with comparisons 1950-51

Item	Year beginning October 1		
	1948-49 reported	1949-50 expected	1950-51 suggested
	Tons 1000	Tons 1000	Tons 1000
Other farm-produced concentrates			
Soybeans fed	8	8	8
Skim milk fed (dry basis)	10	10	10
Hay			
Carryover beginning of year	504	492	400
Tame hay production	3,516	3,351	3,770
Total supply	4,020	3,843	4,170
Carryover end of year	492	400	500
Net supply	3,528	3,443	3,670
Total needed for feeding livestock			
Available for other purposes			
Inshipments needed			
Other roughages produced and fed			
Corn silage	1,183	1,150	1,100
Corn stover	1,200	1,100	1,000
Small grain straw	150	150	150
Grazing capacity of pastures and ranges (in animal unit months)		Grazing season	
	1949 expected a.u.m.	1950 expected a.u.m.	1951 suggested a.u.m.
Rotation (cropland) pasture	4,000	4,550	4,837
Open permanent pasture and range in farms	7,200	7,200	7,200
Woodland pasture in farms	650	650	600
Other pasture in farms	2,475	2,475	2,475
Total carrying capacity	14,325	14,875	15,112
Total requirements for livestock	12,218	12,040	12,374

Form 4 - Ohio: Suggested production of livestock and livestock products, 1950, with comparisons

Items of livestock and livestock products	Unit	Reported for Jan.1 1948	Reported for Jan.1 1949	Probable Jan. 1 1950		Suggested Jan. 1 1951
Column	1	2	3	4	5	6
		1000 units	1000 units	1000 units	1000 units	1000 units
On farms January 1						
Horses, mules and colts	No.	193	160	135		125
Cattle and calves, all	No.	2,150	2,128	2,130		2,200
Cows kept for milk, 2 years /	No.	1,071	1,060	1,060		1,090
Other cows, 2 years /	No.	92	94	95		100
Sheep and lambs, all	No.	1,320	1,259	1,250		1,400
Ewes, 1 year /	No.	828	762	760		875
Hens and pullets	No.	18,294	17,435	18,800		19,000
		Reported in 1948	Expected in 1949	Probable in 1950	Suggested for 1950	Suggested for 1951
During year						
Sows farrowed, spring 1/	No.	381	469	450	435	435
Sows farrowed, fall 2/	No.	352	405	400	390	390
Chickens raised 3/	No.	24,252	29,000	29,000	29,000	29,000
Commercial broiler production	No.	3,583	4,500	4,500	4,500	4,500
Turkeys raised	No.	1,031	1,350	1,250	1,250	1,250
Milk cows, ave. during the year	No.	1,023	1,013	1,015	1,026	1,040
Milk produced	1000 lbs.	5,309	5,256	5,266	5,323	5,396
Wool shorn	Lbs.	8,635	8,233	8,175	8,175	9,156
Eggs produced	Doz.	216,583	206,430	222,592	222,570	224,900
Cattle put on feed 4/	No.	120	130	125	125	125
Sheep and lambs put on feed 4/	No.	280	300	300	300	325
Net production of hogs 4/ cwt.	Lbs.	9,729	11,380	11,770	11,452	11,005

1/ December 1 (of previous year) to June 1.
2/ June 1 to December 1.
3/ Excluding commercial broilers.
4/ Twelve-month period beginning on October 1.

TABLE 6: Ohio - Estimated Net Weight Production of Hogs

Year and pig crop	Sows farrowing	Pigs per litter	Pigs saved	Death loss		Hogs raised	Average market weight	Total weight produced	Percentage of weight put on during feed year	Net production
				Percent	No. of head					
	1000 head	head	1000 head	percent	1000 head	1000 head	pounds	1000 pounds	percent	1000 pounds
1948-49 reported										
Spring 1948	381	6.87	2,617	10.4	273	2,344	233	546,152	40	218,460
Fall 1948	352	7.02	2,471	10.4	257	2,214	240	531,360	90	478,224
Spring 1949	469	6.83	3,203	10.5	336	2,867	225	645,075	60	387,045
Fall 1949	405	6.80	2,754	10.5	289	2,465	220	542,300	10	54,230
Total										1,137,959
1949-50 probable										
Spring 1949	469	6.83	3,203	10.5	336	2,867	225	645,075	40	258,030
Fall 1949	405	6.80	2,754	10.5	289	2,465	220	542,300	90	488,070
Spring 1950	450	6.60	2,970	10.5	311	2,659	235	624,865	60	374,919
Fall 1950	400	6.80	2,720	10.5	286	2,434	230	559,820	10	55,982
Total										1,177,001
1950-51 suggested										
Spring 1950	435	6.60	2,871	10.5	301	2,570	225	578,250	40	231,300
Fall 1950	390	6.80	2,652	10.5	278	2,374	220	522,280	90	470,052
Spring 1951	435	6.60	2,871	10.5	301	2,570	225	578,250	60	346,950
Fall 1951	390	6.80	2,652	10.5	278	2,374	220	522,280	10	52,228
Total										1,100,530

Form 5a

Ohio: Estimated quantities of feeds needed for feeding livestock reported for the 12-month period beginning October 1, 1948.

Class of livestock	Feed per animal, bird or cwt.					Total livestock and feed					
	Concentrates				Tame and wild hay	Units of livestock	Concentrates			Hay	Pasture and grazing (1000)
	Grains 1/	Seeds and skim milk	Commercial by-products	Total			Grains 1/	Seeds and skim milk	Commercial by-products		
Column	1	2	3	4	5	6	7	8	9	10	11
	Pounds	Pounds	Pounds	Pounds	Pounds	1000 Units	1000 Tons	1000 Tons	1000 Tons	1000 Tons	A.U. Months
1. Horses, mules & colts	1300	--	5	1305	3000	160	104.0	--	0.4	240	800
2. Milk cows	1665	10	325	2000	3400	1060	882.4	5.3	172.2	1802	6360
3. Beef cows	190	--	10	200	2500	94	9.0	--	0.5	118	658
4. Feeder cattle	1825	10	165	2000	1200	130	118.6	.6	10.7	78	130
5. Other cattle & calves	650	10	90	750	1500	854	276.5	4.2	38.4	640	1708
6. Ewes, 1 year /	75	--	3	78	450	762	28.6	--	1.1	171	762
7. Feeder sheep & lambs	105	--	20	125	200	300	15.7	--	3.0	30	30
8. Other sheep & lambs	40	--	--	40	375	217	4.3	--	--	42	217
9. Hogs, cwt. net production	425	2	38	465	--	11380	2418.2	11.4	216.2	--	1407
10. Hens & pullets	60	--	25	85	xxx	17435	523.0		217.9	--	53
11. Chickens raised	25	0.1	6	31	xxx	29000	362.5	1.5	87.0	--	29
12. Comm. broilers produced	7	--	6	13	xxx	4500	15.7	--	13.5	--	--
13. Turkeys raised	80	--	10	90	xxx	1350	54.0	--	6.7	--	54
14. Other livestock	xxx	xxx	xxx	xxx	xxx	xxx	1.5	--	0.3	15	10
Total	xxx	xxx	xxx	xxx	xxx	--	4814.0	22.8	767.9	3136	12218

1/ Includes corn, oats, barley, rye, and wheat, fed from any source including harvested grain, corn silage, corn fodder, unthreshed grain, or commercial mixed feeds.

Form 5b

Ohio: Estimated quantities of feeds needed for feeding livestock expected for the 12-month period beginning October 1, 1949.

Class of livestock	Feed per animal, bird or cwt.					Total livestock and feed					
	Concentrates				Tame and wild hay	Units of livestock	Concentrates			Hay	Pasture and grazing (1000)
	Grains 1/	Seeds and skim milk	Commercial by-products	Total			Grains 1/	Seeds and skim milk	Commercial by-products		
Column	1	2	3	4	5	6	7	8	9	10	11
	Pounds	Pounds	Pounds	Pounds	Pounds	1000 Units	1000 Tons	1000 Tons	1000 Tons	1000 Tons	A.U. Months
1. Horses, mules & colts	1300	--	5	1305	3000	135	87.7	--	0.3	203	675
2. Milk cows	1665	10	325	2000	3400	1060	882.4	5.3	172.2	1802	6360
3. Beef cows	190	--	10	200	2500	95	9.0	--	0.5	119	665
4. Feeder cattle	1825	10	165	2000	1200	125	114.0	.6	10.3	75	125
5. Other cattle & calves	650	10	90	750	1500	860	279.5	4.3	38.7	645	1720
6. Ewes, 1 year /	75	--	3	78	450	760	28.5	--	1.1	171	760
7. Feeder sheep and lambs	105	--	20	125	200	300	15.7	--	3.0	30	30
8. Other sheep and lambs	40	--	--	40	375	210	4.2	--	--	39	210
9. Hogs, cwt. net production	425	2	38	465	---	11770	2501.1	11.7	223.6	--	1350
10. Hens and pullets	60	--	25	85	xxx	18800	564.0	--	235.0	--	56
11. Chickens raised	25	0.1	6	31	xxx	29000	362.5	1.4	87.0	--	29
12. Comm. broilers produced	7	--	6	13	xxx	4500	15.7	--	13.5	--	--
13. Turkeys raised	80	--	10	90	xxx	1250	50.0	--	6.3	--	50
14. Other livestock	xxx	xxx	xxx	xxx	xxx	xxx	1.5	--	0.3	15	10
Total	xxx	xxx	xxx	xxx	xxx	xxx	4915.8	23.3	791.8	3099	12040

1/ Includes corn, oats, barley, rye, and wheat, fed from any source including harvested grain, corn silage, corn fodder, unthreshed grain, or commercial mixed feeds.

Form 5c

Ohio: Estimated quantities of feeds needed for feeding livestock suggested for the 12-month period beginning October 1, 1950.

Class of livestock	Feed per animal, bird or cwt.					Total livestock and feed					
	Concentrates				Tame and wild hay	Units of livestock	Concentrates			Hay	Pasture and grazing (1000)
	Grains 1/	Seeds and skim milk	Commercial by-products	Total			Grains 1/	Seeds and skim milk	Commercial by-products		
Column	1	2	3	4	5	6	7	8	9	10	11
	Pounds	Pounds	Pounds	Pounds	Pounds	1000 Units	1000 Tons	1000 Tons	1000 Tons	1000 Tons	A.U. Months
1. Horses, mules & colts	1300	—	5	1305	3000	125	81.2	—	0.3	188	625
2. Milk cows	1665	10	325	2000	3400	1090	907.4	5.4	177.1	1853	6540
3. Beef cows	190	—	10	200	2500	100	9.5	—	0.5	125	700
4. Feeder cattle	1825	10	165	2000	1200	125	114.0	.6	10.3	75	125
5. Other cattle and calves	650	10	90	750	1500	895	290.8	4.5	40.3	671	1790
6. Ewes, 1 year +	75	—	3	78	450	875	32.8	—	1.3	197	875
7. Feeder sheep & lambs	105	—	20	125	200	325	17.1	—	3.2	33	33
8. Other sheep and lambs	40	—	—	40	375	235	4.7	—	—	44	235
9. Hogs, cwt. net production	425	2	38	465	---	11005	2338.5	11.0	209.1	—	1305
10. Hens and pullets	60	—	25	85	xxx	19000	570.0	—	237.5	—	57
11. Chickens raised	25	0.1	6	31	xxx	29000	362.5	1.4	87.0	—	29
12. Comm. broilers produced	7	—	6	13	xxx	4500	15.7	—	13.5	—	—
13. Turkeys raised	80	—	10	90	xxx	1250	50.0	—	6.3	—	50
14. Other livestock	xxx	xxx	xxx	xxx	xxx	xxx	1.5	—	0.3	15	10
Total	xxx	xxx	xxx	xxx	xxx	xxx	4795.7	22.9	793.6	3201	12374

1/ Includes corn, oats, barley, rye, and wheat, fed from any source including harvested grain, corn silage, corn fodder, unthreshed grain, or commercial mixed feeds.